

REMARKS

Claims 1, 4, and 5 remain in this application. Claims 2-3 and 6-12 are now canceled, and new claim 13 is added. Reconsideration of the application is requested.

Support for new language appearing in claim 1 appears, *inter alia*, in original claim 4, in lines 16-25 on page 18, from line 24 on page 20 to line 2 on page 21, and in lines 5-19 on page 22 of the original specification.

It is respectfully submitted that one skilled in automotive production line planning would not consider the terms identified in section 1 on page 2 of the Office Action "unclear, inexact, or verbose," and that the specification, in its present form, complies with all statutory and regulatory requirements.

The informality identified by the Examiner in section 2 on page 2 of the Office Action is eliminated above.

The claim amendments above are made following consideration of the comments provided by the Examiner in sections 3 and 4 on pages 2-6 of the Office Action. It is respectfully submitted the specification describes the invention, as presently claimed, in terms that are sufficiently full, clear, concise, and exact as to comply with 35 U.S.C. § 112, first paragraph, and that the claims, as they now appear in the application, comply with 35 U.S.C. § 112, second paragraph.

Claim 1 above reflects certain specific features. More particularly, claim 1 now reflects that the processing unit propagates the building sequence at a point in the automobile production line between two processes in the automobile production line, which corresponds to an assembly completion point, to preceding

and succeeding processes with lead-time shifting by employing the number of vehicles residing or accumulated between two processes, thereby deciding an optimum building sequence for each of the preceding and succeeding processes. Claim 1 further reflects that the automobile production line is a mixed line including branches and joints, and that the sequence evaluating unit evaluates the building sequence for the mixture line, which is prepared by the initial lead-time developing unit, as a penalty value based on a sum of satisfying degrees, at all points at which lead-time shifting has been performed. It is respectfully submitted that these features distinguish the present invention from the disclosures relied on by the Examiner.

Independent claim 1 is rejected, along with now-canceled claims 10 and 12, claim 4, and claim 5, as anticipated by the Daferner publication relied on previously. Reconsideration is requested. It is respectfully submitted that the Daferner publication fails to disclose the features of the present invention noted above. The Daferner document, instead, discloses applying an algorithm to a model mix quality, which is a total valuation function, by introducing characteristics of distance and density for optimizing total production cost. While the comments provided by the Examiner in the paragraph spanning pages 7-8 of the Office Action are noted, the "shifting of order 3, 4, 5, for air conditioning" operation identified means moving to a buffer station to decrease density, and does not mean lead-time shifting as claim 1 presently requires. The Daferner disclosure, moreover, concerns a single automobile production line rather than a mixed line including branches and joints as claim 1 specifies. Finally, as the Daferner disclosure does not disclose a mixed line, that disclosure

fails to suggest calculating a sum of satisfying values (degrees) as a penalty value at all points where lead-time shifting has been performed as claim 1 above requires.

It is respectfully submitted that claim 1 as it appears above is not anticipated by the Daferner disclosure relied on for reasons discussed. Claims 4 and 5 depend on claim 1 and are also not anticipated by the Daferner disclosure.

Independent claim 1 is also rejected, along with now-canceled claims 10 and 12, claim 4, and claim 5, as anticipated by the Bergeon patent relied on previously. Reconsideration is requested. The Bergeon patent also fails to disclose the features of the present invention noted above.

The Bergeon patent discloses deciding an arrangement and a vehicle sequence, based on a rotation position number, and assesses a penalty value. The Bergeon patent, however, does not disclose a processing unit that propagates the building sequence at a point in the automobile production line between two processes in the automobile production line, which corresponds to an assembly completion point, to preceding and succeeding processes with lead-time shifting as claim 1 now requires. While the comments set forth by the Examiner in the paragraph spanning pages 12-13 of the Office Action are noted, the Bergeon patent discloses only replacing the two vehicles. The Bergeon disclosure, furthermore, concerns a single automobile production line, and not relate to a mixed line including branches and joints as claim 1 presently requires. Since the Bergeon disclosure does not concern a mixed line, the Bergeon disclosure cannot be considered to disclose evaluating a sum of satisfying values as a penalty value

at all the points where lead-time shifting has been performed as claim 1 specifies.

It is respectfully submitted that claim 1 as it appears above is not anticipated by the Bergeon patent disclosure relied on for reasons discussed. Claims 4 and 5 depend on claim 1 and are also not anticipated by the Bergeon patent disclosure.

Claim 1 above is not anticipated by either of the disclosures relied on by the Examiner for reasons discussed. Nothing identified by the Examiner suggests that either the production sequence planning method forming the subject matter of the Daferner publication or the scheduling method forming the subject matter of the Bergeon patent is performed by the building sequence planning system as now specified in claim 1, moreover, and it is further submitted that claim 1 above is patentable. Claims 4 and 5, which depend on claim 1, should be patentable as well.

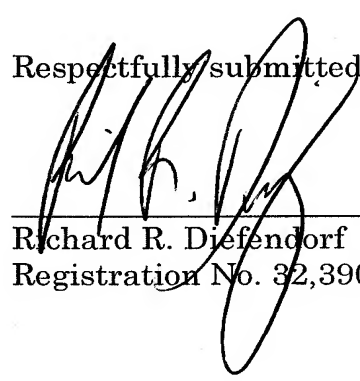
New claim 13 is a process claim, but in many respects is similar to claim 1. It is respectfully submitted that nothing identified by the Examiner suggests an automobile production line building sequence planning system operating process including the particular "preparing," "developing," "evaluating," "deciding," and "propagating" acts or operations defined by claim 13, and that claim 13 is patentable along with claims 1, 4, and 5.

It is respectfully submitted that this application is now in allowable condition. If there are any questions regarding this Reply or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an extension of time sufficient to effect a timely response. Please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #056205.55398US).

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Respectfully submitted,



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